From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, December 12, 2019 5:19 PM
To: engr-press; Brett Harned
Subject:[PRESS] Post Meeting Recap 12/12

Categories: CAPSTONE, Red category

Hey everyone,

* Recap
    * Brett, please refer to the DAC Specs section for information on the DAC requirements we are looking for. The Wiki page is also linked in the Additional Documents section.
    * In today's meeting, we touched base with Brett and Ben about our format for data-logging in a CSV file as well as a possible DAC for the system.

* Key Takeaways
    * Understand the difference between raw and analyzed data. Analyzing should take place after the test is complete, and raw data should be recorded during the test.

* Key Dates
    * 12/18/2019
        * Updated Wiki page is due
    * 1/16/2020
        * Next team meeting with Brett and Ben

* To-Do
    * Chris
        * Continue making updates to Wiki page (due 12/18)
            * Design Considerations
            * Team Members
            * Additional Documentation
        * Compile meeting minutes to a single document and add to Wiki and fall portfolio
    * Andrew
        * LabVIEW - debounce detection for opening of the switch
        * LabVIEW - Refined calibration cycle to obtain better threshold values
        * Send professional profile photo to Chris for use on the Wiki
    * Cody
        * LabVIEW - datalogging 2D arrays
        * Send professional profile photo to Chris for use on the Wiki

* Additional Documents
    * There is a new directory added to OneDrive for the fall semester portfolio. This is located in Portfolio/FA2019 Portfolio.
    * Wiki page: http://mindworks.shoutwiki.com/wiki/PRESS_Button_Cycler_Enhancements

* DAC Specs

* The DAC we are looking at purchasing is the model USB-6255 and part number 779958-01. Requirements that led us to this DAC were:
    * 80 analog input single-ended channels
        * Need at least 20 analog inputs to use for recording switch resistance
        * Need at least 20 analog inputs to use down the road for displacement feedback with switch characterization
        * Need another 10-20 inputs for force feedback
        * Speed and resolution are less of a concern. Anything >= 12 Bit resolution will work great as well as >= 100 kS/s for speed requirements
    * 24 digital I/O
        * Ideally, 30 would be nice to run 30 Bimbas; however, 24 fits within the preferred product requirement.
    * For more common DAC applications, the USB-6008 will work great for smaller apparatuses.

Have a great evening,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, December 11, 2019 12:25 PM
To: engr-press
Subject: [PRESS] Post Meeting Recap 12/11

Categories: CAPSTONE, Red category

Hey everyone,

* Recap
    * In today's meeting, we worked on organization of our portfolio and got up to speed on the requirements left for our Priority 1 system.

* Key Takeaways
    * The DAC we are looking at purchasing for next semester is the model USB-6255 and part number 779958-01.
    * For more common DAC applications, the USB-6008 will work great for their needs.

* Key Dates
    * 12/11
        * Fall portfolio due

* To-Do
    * Chris
        * Continue making updates to Wiki page
            * Design Considerations
            * Team Members
            * Additional Documentation
        * Compile meeting minutes to a single document and add to Wiki and fall portfolio
    * Andrew
        * LabVIEW - debounce detection for opening of the switch
        * LabVIEW - Refined calibration cycle to obtain better threshold values
        * Send professional profile photo to Chris for use on the Wiki
    * Cody
        * LabVIEW - datalogging 2D arrays
        * Send professional profile photo to Chris for use on the Wiki

* Additional Documents
    * There is a new directory added to OneDrive for the fall semester portfolio. This is located in Portfolio/FA2019 Portfolio.

Have a great day,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Friday, November 15, 2019 12:02 PM
To: engr-press
Subject: [PRESS] Post Meeting Recap 11/14

Categories: CAPSTONE, Red category

Hey everyone,

* Recap
    * In yesterday's meeting with Brett, we showed him our current progress (V0-03) and answered a couple of questions about button debounce.

* Key Takeaway
    * Things we want to actively measure and log
        * The button bounce lasts longer that the debounce threshold and when this occurs.
        * Running average of closed-loop resistance. If this is more than 1 std. dev. off -> log it
        * If a switch fails to close or open
    * Just a quick note: I am very excited to see the progress we've made on this project. In my opinion, the drawback when it comes to working with software is that it can be harder to "see" the progress. For having no LabVIEW experience before this project as well as a faint background on data-logging concepts, we're killing it! I understand at times that working with software can feel like a dead-end road; however, it's your motivation that keeps the team going! Keep up the good work.

* Key Dates
    * 11/21
        * Logbooks due with self-evaluation
        * Team member citizenship form due
    * 12/4
        * Possible date for design review with client

* To-Do
    * Chris
        * Begin rough presentation to show at AIS design review
    * Andrew
        * LabVIEW debounce detection & implementation
        * LabVIEW logging data w/ intermittent pausing
        * LabVIEW allow user to set debounce threshold before test commences (20ms default)
        * LabVIEW switch-type input from user
            * SPST - bounce only at closure of switch
            * SPDT - bounce at closure and released of switch
    * Cody

        * LabVIEW logging failures and cycle that they occurred.

* Which button failed (cylinder ID and button ID)
* When did the button fail (cycle #)
* Continue cycling the button if the debounce threshold is crossed, but stop cycling the button when the button fails to close
* Order parts to run 4 Bimbas and update the budget.

Have a great weekend,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, November 13, 2019 1:39 PM
To: engr-press
Subject:[PRESS] Post Meeting Recap 11/13
Attachments: AIS_Button-Cycler_V0-03.vi

Categories: CAPSTONE, Red category

Hey everyone,

* Recap
    * In today's team meeting, we revised our Value Proposition Statement, Design Validation Plan, and worked on more LabVIEW implementation.

* Key Takeaway
    * We are getting close to being able to incorporate multiple Bimbas. It would be a great goal to strive for this by the end of the semester.

* Key Dates
    * 11/21
        * Logbooks due with self-evaluation
        * Team member citizenship form due
    * 12/4
        * Possible date for design review with client

* To-Do
    * Chris
        * Begin rough presentation to show at AIS design review
    * Andrew
        * LabVIEW debounce detection & implementation
    * Cody
        * LabVIEW debounce detection & implementation
        * Add 4-channel MOSFET switch to next order
            * https://www.amazon.com/NOYITO-4-Channel-Electronic-Controlled-Completely/dp/B07PS2C4YP/ref=asc_df_B07PS2C4YP/?tag=hyprod-20&linkCode=df0&hvadid=343187910376&hvpos=1o5&hvnetw=g&hvrand=8484824259135615581&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9029641&hvtargid=pla-694411270445&psc=1&tag=&ref=&adgrpid=69721953515&hvpone=&hvptwo=&hvadid=343187910376&hvpos=1o5&hvnetw=g&hvrand=8484824259135615581&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9029641&hvtargid=pla-694411270445
        * Order parts to run 4 Bimbas and update the budget.

* Documents
    * Attached is our latest running version of our LabVIEW code (V0-03). It was also sent in an email not too long before this one.

Best,

Andrew Overby
University of Idaho | Mechanical Engineering
Phone: (208) 659-8751

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, November 7, 2019 8:53 PM
To: engr-press
Subject:[PRESS] Post Meeting Recap 11/7

Categories: CAPSTONE, Red category

Overby, Andrew (over5500@vandals.uidaho.edu) has shared a OneDrive for Business file with you. To view it, click the link below.
<https://vandalsuidaho-my.sharepoint.com/personal/over5500_vandals_uidaho_edu/Documents/PRESS/Product%20Requirements/Value%20Proposition.docx>

Hey everyone,

Hope you are all having a nice evening!

* Recap
    * In today's meeting with Brett, we informed him on our current progress, as well as discussed our updated product requirements document. Lastly, we talked about our next steps to accomplish in the coming weeks.

* Key Takeaway
    * There is no set opinion on what amount of data should be required and saved to an Excel document. We will find more out about this as we carry further in to the project. It is a good idea to consider this factor when moving forward.
    * For our design review (likely to be December 4th) with AIS, start generating pros/cons and challenges we are experiencing, so we can talk them over with our client.
    * If we need an example of a proper design validation plan, take a look at the 6-Axis Robotic Arm capstone team.

* Key Dates
    * 11/21
        * Logbooks due with self-evaluation
        * Team member citizenship form due
    * 12/4
        * Possible date for design review with client

* To-Do (same as yesterday's email)
    * Chris
        * Complete Design Validation Plan
    * Andrew
        * LabVIEW program state implementation
    * Cody
        * LabVIEW debounce detection & implementation
        * Add 4-channel MOSFET switch to next order
        * When we have completed implementation for 1 Bimba, order parts to run 4 Bimbas and update the budget.

* Documents
    * Attached is our project value proposition document. Dr. Beyerlein, please take a look at this and let us know if you have any feedback.

Best,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, November 7, 2019 9:23 AM
To: engr-press
Subject: [PRESS] Post Meeting Recap 11/7

Categories: CAPSTONE, Red category

Hey team,

Hope you are having a good day so far!

* Recap
    * In yesterday's meeting (11/7), we worked on LabVIEW implementation as well as our Design Validation Plan and Project Value Statement.

* Key Takeaway
    * We are officially at the point we were at with the Arduino at snapshot 1. This has been a huge learning curve, and our progress should speed up as our familiarization with LabVIEW increases. Next up is setting up programming states such as "Start", "Pause", and "Stop". After this, we will work on how to detect debounce times in the switch.

* To-Do
    * Chris
        * Complete Design Validation Plan
    * Andrew
        * LabVIEW program state implementation
    * Cody
        * LabVIEW debounce detection & implementation
        * Add 4-channel MOSFET switch to next order
        * When we have completed implementation for 1 Bimba, order parts to run 4 Bimbas and update the budge.

* Documents
    * I created a new folder in OneDrive for all the software versions we have released so far.
    * The Project Value Statement is now in OneDrive in the Product Requirements folder

Regards,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Tuesday, November 5, 2019 10:30 AM
To: engr-press
Subject: Re: [PRESS] Post Meeting Recap 10/31

Categories: CAPSTONE, Red category

Please note,

There is a typo in the "Recap" section. Sentence 2 should be corrected to: "For those of you who weren't present last week, I talked to Brett on my own while Cody and Colin troubleshooted LabVIEW code."

Regards,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu) <over5500@vandals.uidaho.edu>
Sent: Tuesday, November 5, 2019 10:27 AM
To: engr-press <engr-press@uidaho.edu>
Subject: [PRESS] Post Meeting Recap 10/31

Hey team,

Hope you are having a good start to your week!

* Recap
    * I do apologize, for I forgot to send this email out last week after talking with Brett. For those of you who weren't present last week, I talked to been on my own while Cody and Colin troubleshooted some LabVIEW code. We did not have much to update him on, but he did give me feedback on our product requirements document.

* Key Takeaway
    * We are getting closer on getting the simultaneous "Cylinder Actuate -> Read Button Count -> Cylinder Retract" process.
    * Although it may not seem like a lot has been completed in the last couple of weeks, the familiarization with LabVIEW now will save us tons of time later when we are implementing more features in to the system.
    * It is starting to appear that we may not be buying a larger DAQ after all. As long as our implementation is universal among other NI DAQs that AIS may be purchasing, we should be okay with the route we are headed according to Brett.

* To-Do
    * Chris
        * If not already complete, continue sketching concepts of the GUI for LabVIEW. These will be presented at our 2nd client visit (hopefully the week before or after Thanksgiving break)
        * Send Ben updated Product Requirements document from Thursday's feedback (I already edited the document - it just needs to be sent now - on OneDrive)
    * Andrew
        * LabVIEW implementation
    * Cody
        * Add 4-channel MOSFET switch to next order
        * When we have completed implementation for 1 Bimba, order parts to run 4 Bimbas and update the budget
    * All
        * We will work on our Design Validation Plan in our team meeting tomorrow

Have a great rest of your day,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Tuesday, November 5, 2019 10:27 AM
To: engr-press
Subject: [PRESS] Post Meeting Recap 10/31

Categories: CAPSTONE, Red category

Hey team,

Hope you are having a good start to your week!

* Recap
    * I do apologize, for I forgot to send this email out last week after talking with Brett. For those of you who weren't present last week, I talked to been on my own while Cody and Colin troubleshooted some LabVIEW code. We did not have much to update him on, but he did give me feedback on our product requirements document.

* Key Takeaway
    * We are getting closer on getting the simultaneous "Cylinder Actuate -> Read Button Count -> Cylinder Retract" process.
    * Although it may not seem like a lot has been completed in the last couple of weeks, the familiarization with LabVIEW now will save us tons of time later when we are implementing more features in to the system.
    * It is starting to appear that we may not be buying a larger DAQ after all. As long as our implementation is universal among other NI DAQs that AIS may be purchasing, we should be okay with the route we are headed according to Brett.

* To-Do
    * Chris
        * If not already complete, continue sketching concepts of the GUI for LabVIEW. These will be presented at our 2nd client visit (hopefully the week before or after Thanksgiving break)
        * Send Ben updated Product Requirements document from Thursday's feedback (I already edited the document - it just needs to be sent now - on OneDrive)
    * Andrew
        * LabVIEW implementation
    * Cody
        * Add 4-channel MOSFET switch to next order
        * When we have completed implementation for 1 Bimba, order parts to run 4 Bimbas and update the budget
    * All
        * We will work on our Design Validation Plan in our team meeting tomorrow

Have a great rest of your day,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, October 24, 2019 8:24 PM
To: engr-press
Subject: [PRESS] Post Meeting Recap 10/24

Categories: CAPSTONE, Red category

Hey team,

Hope you are enjoying your Thursday evening!

* Recap
    * In today's client meeting, we touched base with Brett about our project's progress as well as a few questions we wanted to clear up.

* Key Takeaway
    * Our goal by the end of the project is to at the BARE MINIMUM replicate what they are doing at AIS's facility while incorporating LabVIEW and data-logging capabilities.
    * Brett mentioned that although it does not have to be implemented, having hardware for the F/D/R relationship at the end of the product would be nice.
    * The company is looking into standardizing DAQs. Brett will get back to us in a few weeks on which ones.
    * Brett will get back to us on whether or not they prefer relays or FETs for controlling the solenoids. For now, we will continue using our breadboard.

* To-Do
    * Chris
        * Begin sketching concepts of the GUI for LabVIEW
    * Andrew
        * LabVIEW implementation
        * 3D print vertical solenoid rack
        * Update process diagram for experimental setup
    * Cody
        * Order parts to run 4 Bimbas and update budget
        * LabVIEW implementation
        * Email Colin the current LabVIEW VI.
    * Tasks to keep on the radar
        * Design validation plan
        * Budget expansion proposal for large-channel DAQ (tentative on if we will need this or not)

Have a great rest of your night,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, October 23, 2019 2:42 PM
To: engr-press
Subject: Post Meeting Recap 10/23
Attachments: PRESS Product Requirements.xlsx; Priority 1 System Diagram.pdf; Priority 1 System Diagram.pptx; Product Requirements.pdf

Categories: CAPSTONE, Red category

Hey Team,

* Recap
    * In today's meeting, we worked on our new product requirements document and LabVIEW implementation for our system. We are now counting clicks in the program, but need to add the debouncing loop and solenoid control.

* Key Takeaway
    * This meeting was very relaxed, and there were not a lot of action items that were covered since we are all still learning how to use the software. That being said, we do have an idea of where we are headed, it is just a matter of finding the right tools in LabVIEW to get there.

* To-Do
    * Chris
        * Send updated product requirements document and system diagram (both attached) to Brett this evening so he has time to look over it before the meeting agenda is sent out tomorrow.
    * Andrew
        * Prepare meeting agenda for tomorrow's meeting
        * Work on figuring out debounce loop in LabVIEW
    * Cody
        * Work on closed/open resistance reading in LabVIEW

* Documents and/or Attachments
    * Attached are the new product requirements document (worksheet form) and a system diagram. These are also available on OneDrive in the "Product Requirements" folder. Please take a look at these to familiarize yourself with our goals and/or current system.

Thanks everyone!

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, October 16, 2019 12:06 PM
To: engr-press
Subject: Post Meeting Recap 10/16

Categories: CAPSTONE, Red category

Team,

* Recap
    * In today's meeting, we discussed revisions to our product requirements document and compiled a portfolio. We also brainstormed changes to the system to accommodate 4 Bimbas and briefly talked about the LabView workflow.

* Key Takeaways
    * In order to measure button force and displacement, we will likely need another 30-channel DAQ down the road. This should be mentioned in tomorrow's meeting.
    * Parts are being 3D-printed to house the 4 solenoids. Exhaust bleed valves are going to be installed to keep the air cylinder from violently hitting the top of the bore.
    * Time to start LabView and DAQ implementation!

* To-Do
    * Chris
        * Send out meeting agenda with Zoom link (sent the agenda to you)
        * Send updated product-requirements document to Brett
    * Andrew
        * 3D-print solenoid rack
    * Cody
        * Order parts for apparatus additions

* Documents and/or Attachments
    * Our first revision of the portfolio is in OneDrive. Feel free to take a look at this and provide feedback.

Thanks and have a great rest of your day!

Andrew Overby
University of Idaho | Mechanical Engineering
<https://verbyengineering.com/>

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, October 10, 2019 11:18 PM
To: engr-press
Subject: Meeting Recap 10/10

Categories: CAPSTONE, Red category

Hey team,

SUMMARY
In today's meeting we discussed with Brett some of the questions we came across after assembling our initial test bench.

KEY TAKEAWAYS
It appears that AIS is willing to put whatever budget forth that is needed if we see certain hardware as a fit to our system. All we need to do is send a proposal document in for them to review.

The more that I hear Ben and Brett's feedback, the more I can relate it to the product requirements document they gave us initially. I firmly believe if we focus on this, we won't lose track. Ben did a great job of putting this together so we don't get lost in the scope.

TO-DO
Over the weekend, I encourage us all to think about our electronic and hardware requirements for the final 30-Bimba system. A couple things I have already brainstormed are electronic pressure regulators and air accumulator tanks. It sounds like they would like us to begin working on this requirement sooner than later. At the beginning of next week, we will also put together slides for Snapshot #1.

ADDITIONAL NOTES
Thanks for all your hard work putting together the initial testing system this week! It looks very impressive and I think it will turn some heads at Snapshot #1. I also later realized that a meeting agenda was not sent out for the Zoom call today with AIS. I apologize on this to anyone who was wanting to join in. We will practice better communication in the future!

Have a great night,
Andrew

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, October 2, 2019 12:12 PM
To: engr-press
Subject: Post Meeting Recap 10/2

Categories: CAPSTONE, Red category

Team,

* Recap
    * In this morning's meeting, we discussed our initial test system and reviewed our product requirements document.

* Key Takeaways
    * AIS uses multiple air cylinders to lock-down their keyboards. Because we only have one, we are going to create a router-style tabbing mechanism that using T-tracks and hex bolts to secure hardware to the base of the gantry.
    * Keyboards are in for testing. AIS sent a standard keyboard along with a business card sized button/encoder panel.
    * Design for the initial test bench is almost complete.

* To-Do
    * Chris
        * Update project schedule
    * Andrew
        * Finish initial test system design and update BOM
        * Discuss initial test system design with team upon completion
        * Obtain rough keyboard dimensions for CAD usage
    * Cody
        * Order parts from BOM and update budget
    * All
        * If you have any questions that were not discussed in the meeting and you would like to ask Ben or Brett tomorrow, please bring them ready.

* Documents and/or Attachments
    * Our product requirements are now in OneDrive under Product Requirements\PRESS Product Requirements - Rough Draft.pdf. There are a couple of highlighted regions in the regulatory requirements section that we are going to address to Ben and Brett tomorrow.

Thanks and have a great rest of your day!

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, September 26, 2019 9:41 PM
To: engr-press
Subject: Post Meeting Recap 9/26

Categories: CAPSTONE, Red category

Hey everyone,

Hope you all had a good evening!

* Recap
    * In today's mentor/instructor meeting, we primarily discussed our product requirements and addressed a few questions to Ankit regarding data acquisition with our system.

* Key Takeaways
    * DAQs are expensive, and we should try our best to not use a large one due to the cost. We will start small and expand off of that if needed.
    * We will start testing with Labview by implementing 1 digital output and 2 digital inputs to a DAQ device. The output will control the solenoid that actuates the cylinder, while the 2 digital inputs will measure voltage and current to calculate resistance through the button.
    * We should start building ASAP and have a physical demonstration of our test specimen done for snapshot 1

* To-Do
    * Chris
        * Create project schedule (feel free to discuss over text if you have more questions)
    * Andrew & Cody
        * Begin product requirements document (refer to "Documents" section of this email for location of an example)
    * All
        * Brainstorm ideas for test-bench that will encompass what AIS is after for their button cycler

* Documents and/or Attachments
    * Steve gave us a great example of a successful product requirements document. It is now in OneDrive under the folder "Product Requirements"

Thanks and have a great night!

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, September 25, 2019 2:45 PM
To: engr-press
Subject: Recap on Today's Visit at AIS

Categories: CAPSTONE, Red category

Team,

Thanks for all waking up early today in order to make it to AIS for discussing our project! I thought it was a great experience to get a quick peak at how the company functions.

* Recap
    * In summary, there were a lot of questions today we all asked, and I feel like we are in a great position because they are giving us creative freedom over how we want to proceed with the project.

* Key Takeaways (also can be implemented in to our product requirements)
    * Ben wants to use a LabView setup for data acquisition
    * We are not required to use the Bimba air cylinders if we find a better solution
    * 3 Hz button cycling rate seems like a great starter point for testing
    * We can use a new controller instead of the existing PLC that communicates over R232
    * A backup (redundant) system is an idea Ben had in case the main system fails when counting button cycles
    * The best part... creative freedom! Let's use this to our advantage and give them a great end-product!

* Contact Information
    * Brett Harned (U of I EE Alum): brett.harned@advancedinput.com

* To-Do
    * All
        * Start thinking about the product requirements and we will sync-up with these tomorrow during our all-group meeting
    * Andrew and/or Cody
        * One of us will talk to Bill about getting a workstation set up in the design suite
    * Cody
        * Don't forget to bring the Bimba air cylinder and gantry cross-member to the meeting tomorrow. It may be needed for discussion purposes.

See you all tomorrow,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Thursday, September 19, 2019 10:36 PM
To: engr-press
Subject: Recap on Today's Meeting

Categories: Red category, CAPSTONE

Hey guys,

I really enjoyed our meeting today. I feel like we were all able to get a better feeling of the questions that we will ask Ben. Hopefully he will contact us early next week so we can get a time scheduled to meet with him.

* Recap
    * Today we presented questions for the interview along with the budget to obtain feedback from our lead instructor and mentor on our next steps forward. These discussions involved:
        * Round-table of possible questions to ask client (will compile in to document at next member meeting)
        * Costs regarding budget such as machine shop hours & other added fees (Cody has these noted in his logbook)
        * Client visit will likely be Wednesday or Friday morning where we will leave Moscow around 5:45-6:00am and return around 12:00pm same-day.
        * We did not due shop orientation today, but will schedule with Colin next week

* Key Dates
    * Mentor/instructor meeting: Thursday 9/26 @ 4:30pm in GJ senior design suite
    * Next "member" team meeting: Wednesday 9/25 @ 11:00am in Library-2nd floor
    * Possible meeting to finalize client questions: Tuesday 9/24 @ 4:45pm in JEB ThinkTank

* To-Do (roughly the same as yesterday's post-meeting email)
    * Chris
        * Become familiar with Direct Logic 205 Modules
        * Begin generating project schedule
    * Cody
        * Look in to ways to regulate force and displacement on air cylinders
    * Andrew
        * Get to know Bimba air cylinders and other necessary equipment to operate one
        * Look in to pressure-feedback loops for air cylinders in order to regulate output force
    * All
        * Update team contract
        * Research how to measure button health in terms of resistance
        * Refresher on debouncing and how to incorporate it to tactile switches (Arduino likely has great documentation on this)

* Documents and/or Attachments
    * There is a document in Google Drive called "Client Interview Questions". Please begin to fill out the document with ideas you have jotted down in your logbooks.

* Additional Points
    * Have a great weekend everyone!

Regards,

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Wednesday, September 18, 2019 12:57 PM
To: engr-press
Subject: Post Meeting Recap

Categories: Red category, CAPSTONE

Hey everyone,

Great meeting!

* Recap
    * Today we discussed project management and budgeting topics that are going to pave the way for the future of our project. These included:
        * Questions for our client regarding product requirements
        * Rough outline of costs for the project budget
        * Research items to touch-up on while we wait for Ben to get back to us

* Key Dates
    * Shop orientation: Thursday 9/19 @ 3:30pm in GJ shop
    * Mentor/instructor meeting: Thursday 9/19 @ 4:30pm in GJ senior design suite
    * Next "member" team meeting: Wednesday 9/25 @ 11:00am in Library-2nd floor
    * Possible meeting to finalize client questions: Tuesday 9/24 @ 4:45pm in JEB ThinkTank

* To-Do
    * Chris
        * Become familiar with Direct Logic 205 Modules
        * Begin generating project schedule
    * Cody
        * Begin generating project budget
    * Andrew
        * Get to know Bimba air cylinders and other necessary equipment to operate one
        * Look in to pressure-feedback loops for air cylinders in order to regulate output force
    * All
        * Research how to measure button health in terms of resistance
        * Refresher on debouncing and how to incorporate it to tactile switches (Arduino likely has great documentation on this)

* Documents and/or Attachments
    * I placed a few new documents in OneDrive under the "Product Requirements" folder. It will be useful to fill these documents out as soon as we can. These files are the templates provided on the Capstone site. As a result, they are very unofficial. We will format these to our liking in the future.

* Additional Points
    * Remember that although the meeting with our client is later than we hoped for, we can still capitalize and use this time for diving deeper in to the components that make up the project!

See you all tomorrow!

Regards,

Andrew Overby

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Friday, September 13, 2019 12:37 PM
To: engr-press
Subject: Meeting Recap

Categories: Red category, CAPSTONE

Hey everyone,

Great meeting today! We had some great discussions and I am looking forward to seeing this project sprout as the semester continues.

* Summary
    * Today, we completed our team contract and set up templates for meeting agendas and post-meeting emails. This will aid in keeping a consistent structure among all team members sending this information out.

* Key Takeaways
    * Instructor/mentor meeting: Thursday 9/19 @ 4:30pm
    * Regular team meetings: Wednesday @ 11:00 am
    * Since working on documents together is easiest with Google Drive, it will be used for editing material. However, a OneDrive has been made to hold all finalized documents. This will make it easier for our lead instructor and/or mentor to view since it is linked to our University accounts. In short, Google Drive = Editor; OneDrive = Final Drafts.

* To-Do
    * Setup meeting with AIS to tour the facility and discuss product requirements (Chris)
    * Begin brainstorming questions for the meeting with AIS (All)

* Documents and/or Attachments
    * The team contract has been completed. This will be updated as the project progresses and is now ready for review in OneDrive.
    * A template for both post-meeting emails and team agendas are now available on OneDrive.

* Additional points
    * PRESS <https://vandalsuidaho-my.sharepoint.com/:f:/g/personal/over5500_vandals_uidaho_edu/EsE3T6HF-YpFrJRTHxv4HtYB4j2o6lKffqJ2gQU6H4Gg3Q> - this is the link to the OneDrive folder for our team

Thank you for your time today!

Andrew Overby
University of Idaho | Mechanical Engineering

From: Overby, Andrew (over5500@vandals.uidaho.edu)
Sent: Tuesday, September 10, 2019 9:51 PM
To: Kasper, Cody (kasp4410@vandals.uidaho.edu); Crozier, Christopher (croz7168@vandals.uidaho.edu)
Subject:PRESS Meeting Recap

Categories: CAPSTONE, Red category

Hey guys,

Great meeting today! This email contains some useful info, so it may be worth storing in a folder. Here is a recap on today's meeting:

Key takeaways:
* Team name: P.R.E.S.S. (Proven Repeatable Effective Scientific Solutions)
* First team meeting (no instructor/mentor): Friday 9/13 @ 11am in library

* Initial instructor/mentor team meeting: Thursday 9/19 @ 4:30pm in senior design suite
* Weekly team meetings (after first team meeting): Wednesday @ 11am (tentative location)
* Extra meetings will take place on Monday or Friday @ 11am (tentative location)

Contacts:
* Chris Crozier: croz4718@vandals.uidaho.edu
* Andrew Overby: over5500@vandals.uidaho.edu
* Cody Kasper: kasp4410@vandals.uidaho.edu
* Steve Beyerlein (Instructor): sbeyer@uidaho.edu
* Colin Burkhalter (Mentor): burk0389@vandals.uidaho.edu
* Ben Medeiros (Client): ben.medeiros@advanceinput.com

Team Roles:
* Chris Crozier: Project progress
* Andrew Overby: Recorder (year-long)
* Cody Kasper: Budget/finance liaison
* Other roles that are unassigned: portfolio, wiki-master, primary point of contact for client

For our first meeting on Friday, we will be discussing our team contract, an agenda for our first instructor/mentor meeting, and contacting our client. Please feel free to add to this list as well.

I have attached links for a OneDrive folder as well as a Google Drive folder. Note that on Google Drive, I am not using my school email. I was thinking we could use Google Drive for documents we would all like to work on together, but keep OneDrive as our main storage location since it is easily accessible through our school emails and faculty members. Let me know if you have any objections to this.

Google Drive:
https://drive.google.com/open?id=1AL7cLMyZxH0aXq_vc-NlUQcrE_jrC88U

OneDrive:

PRESS <https://vandalsuidaho-my.sharepoint.com/:f:/g/personal/over5500_vandals_uidaho_edu/EsE3T6HF-YpFrJRTHxv4HtYB4j2o6lKffqJ2gQU6H4Gg3Q?e=Te8HOT>

It's going to be a fun year together and I am excited to see how this project pans out!

Cheers,

Andrew Overby
University of Idaho | Mechanical Engineering